

# North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

# **Division of Waste Management**

Michael F. Easley, Governor William G. Ross, Jr. Secretary

October 17, 2008

Mr. Vernon Smith WCA of High Point, LLC 5830 Riverdale Drive Jamestown, NC 27282

Subject: Application for Permit to Construct – Phase 2 Expansion

WCA of High Point Construction and Demolition Landfill

Permit No. 41-16

Guilford County, Doc ID No. 6002

Dear Mr. Smith:

In my letter of October 3, 2008 (Doc ID 5933), I notified you that the Division of Waste Management, Solid Waste Section (Section) determined your application for a permit to construct Phase 2 of the WCA of High Point Construction and Demolition Landfill (C&DLF) was complete in accordance with GS 130A-295.8(e). A technical review has been conducted and the following comments and requests are offered.

General Application Requirements and Processing for C&DLF Facilities [15A NCAC 13B .0533]

1. The cover sheet of the engineering drawings should include the engineer's seal, the engineer's signature, and the date of signature. [.0533 (b)(3)(B)]

### Facility Plan for C&DLFs [15A NCAC 13B .0537]

- 2. The facility plan should describe the comprehensive development of the C&DLF facility. Therefore, landfill disposal and capacity calculations should include what has been disposed in addition to the projections. Please add a column with the year of operation of the landfill (i.e., 1, 2, 3 ...) and provide the waste to soil ratio used for the cover calculation.
- 3. Drawing FP-2 does not represent the existing site conditions. Facility drawings should be representative of existing site conditions. [.0537 (d) (1)].
- 4. Statements in Section 2.0 Facility Plan Drawings concerning the number of phases, the construction of phases, and the operating life of the phases are confusing. For example, Item 2.2 indicates six phases (Phases 1-6) while item 2.3 states construction is proposed to occur in four phases. Also, Phase 1 is stated as having an expected life of 2.5 years while it has been operating longer than 2.5 years. Please review this and other sections of the application where phases are references for consistency.
- 5. Please change Tables 1-4 to reflect the comprehensive development of the landfill starting from Phase 1. Please include all years in the totals.
- 6. No borrow or stockpile areas are indicated on the drawings. Table 4 Soil Balance lists soil will be available onsite. Will this be stockpiled onsite?
- 7. Item 3.1 states an average daily disposal rate of 420 tons per day assuming 285 operating days per year for an average yearly rate of 119,700 tons. The facility permitting annual waste

- disposal rate is approximately 98,600 tons per year or approximately 315 tons per day with an operation of 6 days per week. Please provide additional information indicating the rates are consistent with the franchise granted by the City of High Point. [.0537 (e) (1) (B)]
- 8. The titles for Table 1 and Table 3 for projected disposal rates state the information is "ash" disposal rates.

### Engineering Plan for C&DLF Facilities [15A NCAC 13B .0539]

- 9. Engineering drawings should include access roads on the site. There is no notation in the legend for roads. If there are roads on the property, please modify the drawings. [.0539(e)]
- 10. Drawing EP-4 references detail 6 on page 9 for the scour hole SH-9. This detail is not on the referenced page.
- 11. The engineering plan must include a map showing the existing ground surface elevations and base grades. The map must include labeled boring locations which indicate seasonal high ground-water level, estimated long term high ground-water level in accordance with Part (b) (2) (E) of Rule .0538 and bedrock level in accordance with Part (b) (2) (F). Also, "separation" is misspelled in several places on Drawing EP-6.

## Construction Requirements for C&DLF Facilities [15A NCAC 13B .540]

12. The latitude and longitude, expressed in decimal degrees, must be indicated at the approximate center of the facility. [.0540 (3)]

### Construction Quality Assurance for C&DLF Facilities [15A NCAC 13B .0541]

13. The construction quality assurance plan should include a plan for holding progress and troubleshooting meetings as described in 15A NCAC 13B .0541 (b) (5). The proceedings of these meetings must also be documented.

#### Operation Plan and Requirements for C&DLF Facilities (15A NCAC 13B .0542)

- 14. If there is common information for both facilities, i.e., operating hours, site access and safety, recording keeping, or information that would make it easier to understand how the facilities operate together, e.g., section 3.1.1.; please put them in the Introduction to the Operation Plan. For example, in the present form, I don't know if the operation hours are the same or if the agreement on emergency response with the City of High Point applies to both facilities.
- 15. The Section is asking applicants to include contact information in the Introduction. Please include name, address, phone, fax and specific contact and email as appropriate for the owner, operator, design engineer, and DENR. You may use the following for DENR.

North Carolina Department of Environment and Natural Resources Division of Waste Management 401 Oberlin Road, Suite 150 Raleigh, NC 27605

Phone: (919) 508-8400 Fax: (919) 715-3605

Field Operations Branch Head: Mark Poindexter Central District Supervisor: Jason Watkins Waste Management Specialist: Hugh Jernigan

- Also, please include contact for emergencies. If it is calling 911, a sentence stating that is all that is required.
- 16. Since the facility has been in operation for several years, please review text to confirm what exists and what is proposed. For example, item 2.1.1 refers to the reclamation area as a proposed site and item 2.1.4 states that a water line and misting system will be installed to control dust during dry periods.
- 17. Item 3.1.1 states that approximately 700 tons/day of C&D solid waste are managed at the site and that approximately 40% will be reclaimed. The permitted disposal rate is 315 tons/day. I did not find any references weighing the materials after the initial weigh in at the scale house. How will you determine the amount of waste disposed in the landfill? How will you determine that amount of material reclaimed?
- 18. Item 3.2.6, paragraph 4 states that "emergency equipment will be called in" in case the fires are too large. I am assuming that you have made arrangements that you have made with local fire protection. Please state that. [.0542 (i) (3)]
- 19. Section 2.8 describes ACM management. Please provide a statement referencing that it was reviewed and accepted by the Health Hazards Unit of NC Department of Health and Human Services.
- 20. Item 2.8.2 describes how you would handle ACM is found at the reclamation area. The plan states that some loads may go directly to the landfill. Asbestos waste, which must be managed in accordance with 40 CFR 61, is not mentioned in the Operation Plan for the landfill. How would the ACM be handled if in loads going directly to the landfill? [.0542 (c) (2)]
- 21. Drawings EP-1, EP-2, and EP-3 do not identify on-site roads in the legend. If this is an error, please correct.
- 22. In item 3.2.5b there is a reference to Section 5.3 of the plan. In the revised plan, it is section 3.5.3. Please correct this and review the plan for similar mistakes.
- 23. The Waste Acceptance Requirements in 3.3 are more detailed that the requirements for the reclamation area. Would these requirements be common to both facilities or is there a difference?
- 24. Item 3.5.4, paragraph 2 states that WCA was given approval to use the "fines" from their recycling/processing area for alternate weekly cover." Please provide a copy of that approval.
- 25. Item 3.5.4, paragraph 3 states that WCA proposes to use mulch mixed with soil as an alternate weekly cover. WCA should contact Jason Watkins of the Field Operation Branch in the Winston-Salem office at (336) 771-5092 to initiate the request and discuss what is required.
- 26. Please modify 3.2.5c to state that all windblown material must be collected and disposed at the conclusion of each operating day. [(.0542 (g) (3)].
- 27. The Monitoring Plan prepared in accordance with Rule .0544 should be included as an appendix to the Operation Plan. [.0542 (n) (3) (A)] This should be done after approval of the Design Hydrogeologic Report for the final version of the Operation Plan.

### Closure and Post-Closure Requirement for C&DLF Facilities (15A NCAC 13B .0543)

- 28. The cap system must be designed and constructed to have a permeability less than or equal to the soils underlying the landfill, or the permeability specified for the final cover in the effective permit, or a permeability no greater than 1.0 x 10<sup>-5</sup> cm/sec, whichever is less. Could you state or provide a reference to data that indicates the permeability of the soils underlying the landfill? [.0543 (c) (1) (A)]
- 29. The closure and post-closure plan should be a stand alone document. Information on the construction of the cap system should be included in the plan rather than referenced to the engineering plan. [.0543(d) (1)]

- 30. In the cost estimate, the topsoil cost was based on the use of on-site material, but in the soil balance table in the facility plan (Table 4) there are soil deficits. The table starts at Phase 3 with a deficit greater than the available on-site soil. Can you explain how this will work? [.0543 (d) (5)]
- 31. Please update cost estimates to current year.

Monitoring Plans and Requirements for C&DLF Facilities (15A NCAC 13B .0544)

- 32. In item 3.7.3c, I would prefer that you move the bullet about taking immediate steps to protect human health to the top of the list to prevent any confusion on what should be done first.
- 33. In item 7.3.3, last paragraph Please add that a copy of the landfill gas remediation plan must be placed in the operating record. [.0544 (d) (3) (D)]
- Where specifically will you maintain the operating record? Will records for the reclamation area and landfill be kept at the same location?

For your reference, the Solid Waste rules can be found on the Section's website at <a href="http://www.wastenotnc.org/swhome/rule.htm">http://www.wastenotnc.org/swhome/rule.htm</a>.

Please submit revisions to application as replacement pages or sections to the application already submitted. Revisions to the application should be clearly identified with a revision date in either the header or the footer. Two paper copies plus one electronic copy will suffice. Please note that some comments may only address a particular section of your report, while the information appears in other areas (for instance some statements made in the facility plan, also appear in the engineering or operations plan). Please proofread your submittal carefully, so that the entire application is consistent from section to section. The final submittal must also include an appendix with correspondence.

These comments are intended to expedite the review of the referenced application, and in no way do they restrict the Section's right to request additional information during the technical review process. If you should have any questions regarding this matter please contact me at (919) 508-8542, or by email at pat.backus@ncmail.net.

Sincerely,

Patricia Backus, P.E. Environmental Engineer

Pat Backer

cc: Charles Hiner, Golder Associates

Jason Watkins, DWM

Ed Mussler, DWM Hugh Jer

Allen Gaither, DWM Hugh Jernigan, DWM

Mike McFeeley, WCA of High Point